finger press of the user on a second part of the touch screen showing the camera view, while keeping the first point touched.

**[0085]** In order to obtain a closer look of the background object, the user of the mobile device compresses the space between the first and the second points. Accordingly, an input of the space compression is obtained from the user (**708**), for example by detecting a pinching gesture with the fingers pressing the first and second part of the touch screen. According to an embodiment, the length of the pinching gesture defines the amount of compressing the space between first and second point.

**[0086]** As a result, the user is provided with a compressed camera view (**710**), where a 3D model of the building or an architectural object is superimposed on the image part of the actual background object of the camera view such that the size of the 3D model is increased proportional to the length of the pinching gesture.

**[0087]** In the embodiment described above, the middle part of the compressed camera view, i.e. the part between the first and the second point, is typically uninteresting for the user. Thus, according to an embodiment, the middle part of the compressed camera view is substantially blurred in order to focus the attention to the selected first and second points.

**[0088]** In a similar manner as described in the step **206** or in connection with FIG. **6** above, the user may be provided with additional information about buildings and objects at the first and second points. The additional information may be obtained from the same memory or database as the 3D models, for example.

**[0089]** According to an embodiment, instead of or in addition to using the camera view captured by the mobile device, the mobile device may be provided with a panorama view representing the area where the mobile device is currently located. The panorama view may be obtained from the same memory or database as the 3D models, for example. The panorama view to be used may be selected, for example, on the basis of the location information and the orientation information of the mobile device.

**[0090]** According to an embodiment, the additional information may comprise a miniature map placed in the camera view showing an indication of the compressed space. The miniature map may show the locations of the first and the second point as expanded in size and the middle part there between as compressed in size.

**[0091]** A skilled person appreciates that the order of the above steps may vary in various ways. For example, the order of determining the foreground object and the background object is irrelevant for the operation of the embodiment. Thus, the background object may be determined as the first point and the foreground object as the second point. Moreover, the 3D models may be obtained only after the first and the second points have been selected.

**[0092]** An example of the embodiment is shown in FIGS. **8***a* and **8***b*, where a camera view is obtained on a street in Helsinki. In FIG. **8***a*, the user selects the first and the second point in the camera view by pressing the points with fingers. The first point is a foreground building on the left side of the camera view. The second point is the National museum shown in the background of the camera view. In response to selecting the first and second points, the corresponding 3D map coordinates for these buildings are determined.

**[0093]** In FIG. **8***b*, the user pinches the fingers (indicated by the arrow) to compress the space between the first and second point. The obtained 3D model of the National museum is superimposed in a larger size on top of the image of the actual building, wherein the distance of pinching the fingers defines the size of the National museum 3D model. In other words, the distance of pinching the fingers also defines the amount of compressing the middle space. The middle space of the camera view is preferably blurred, as shown in FIG. **8***b*, since it is substantially irrelevant for the user.

**[0094]** According to an embodiment, instead of or in addition to using 3D models superimposed in a larger size on top of the image of the actual building, partial photos of the location of the second point may be used for representing the second point. The partial photos may be used as picture-in-picture and by zooming them in a larger size on top of the image of the actual building, the impression of compressing then middle space between the first and the second point can be created.

**[0095]** FIGS. **9***a* and **9***b* show an example, where the additional information in the form of a miniature map placed in the camera view is applied to the example of FIGS. **8***a* and **8***b*. FIG. **9***a* shows the miniature map after the user has selected the first and the second points. In response to compressing the space between the first and the second points by the pinching gesture, the compression of space may be shown in the miniature map as distorted dimensions, where the sizes of the areas around the first and second point are expanded in size whereas the middle space is compressed. Thus, the interesting areas around the first and second point can be shown more detail. FIG. **9***b* shows an example of the miniature map with distorted dimensions.

**[0096]** FIG. **10** shows another example, where the additional information is shown in the camera view. Additional information may comprise textual information about one or more buildings at the second point, as well as the actual distance between the first and the second points. The amount of information about the second point may depend on the amount of compressing the middle space. Herein, a principle of semantic zoom may be applied such that the more the middle space is compressed, the more detailed additional information is shown about the buildings in the second point. Moreover, the additional information may include information about the building at the first point, and the relationship between the buildings at the first and second points. For example, information about point-of-interests in the middle space, i.e. along the route between the first and the second points, may be shown as a summary in the camera view, as shown in FIG. **10**.

**[0097]** As described above, the 3D model shown on the display of the mobile device may be rotated freely on the display. According to an embodiment, the 3D model may relate to a building or another architectural object. The user may select a 3D model of a building to be superimposed on the camera view and rotate it through interactions on the touch screen. The camera view image underneath the 3D model may be blurred or softened to indicate that the user can focus on manipulating the building's 3D model. The relationship between the user's real-world vantage point and the virtual vantage point he has to the building after rotating its 3D model may be indicated on the display, e.g. by an arrow. Accordingly, by rotating the 3D model of the building, the user can see for example what entrances and shops there are in the other sides of the building than in the current vantage point.